

Mineral Industry Surveys

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TIN IN JULY 1999

Domestic consumption of primary tin in July was estimated by the U.S. Geological Survey to be about the same as that in June and also about the same as that in July 1998.

The *Platt's Metals Week* average composite price for tin in July was \$3.58 per pound, down slightly from that in June, and down 5% from that of July 1998.

Tin Australia NL, formerly the Australian tin mining company Norminco, was set to re-list its common stock on the Australian Stock Exchange. The firm announced that the mining of tin ore at the Leichardt Creek Mine in Queensland would re-start soon after the stock listing. Tin production ceased at Leichardt Creek in January 1997 amid financial difficulties, causing Norminco to delist its shares from the Australian Stock Exchange. Although it has not mined any tin concentrates, Tin Australia has continued to explore its deposits during the past 2 years. The company estimated that its reserves (tin content) total 19,000 tons at its Leichardt alluvial site, in addition to 1,400 tons in a hardrock deposit at Gift, Queensland. The firm was expected to start mining the Gift hardrock reserves before the end of 1999. The full production level of about 2,000 tons of tin-in-concentrate per year was expected to be attained by mid-2000 (CRU Tin Monitor, 1999b).

Despite some suggestions that depressed silver prices would delay construction of the proposed silver, zinc, and tin mine at Pirquitas, Argentina, the latest indications were that the venture remained on schedule. The Sunshine Mining and Refining Company, a leading American-based silver producer, owned the Pirquitas property, and recently appointed Barclays Capital and a division of Standard Bank of London as its financial advisors for the project. The advisors aimed to arrange the necessary bank financing for construction work at Pirquitas to begin in the latter part of 1999. During 1998, Sunshine received positive results from a feasibility study before deciding to proceed with the venture. That study concluded that the site contained 53,000 tons of tin. However, further exploration of the site has since confirmed the existence of an additional 17,800 tons of tin. As

a result of these new findings, Sunshine has increased its planned level of annual tin-in-concentrate production at the site from 3,500 to 4,200 tons. At the envisioned rate of ore extraction, Pirquitas would have a mine life of about 10 years, with production expected to commence in mid-2001. The cost of developing the site was estimated at \$124 million (CRU Tin Monitor, 1999a).

In Thailand, the country's only tin smelter, Thaisarco, announced that it expected to maintain tin production at its target of 15,000 tons for 1999. The smelter has a capacity of 36,000 tons per year and has been gradually raising output since it was taken over by the AMC Group in 1995. Thaisarco estimated domestic tin demand to be 4,600 tons in 1999, still well below the 6,000 tons per year level reached in 1996, before the major Asian economic crisis. Thailand's tin-in-concentrate production for the first half of 1999 totaled 1,200 tons. Government officials stated that the country has 29 tin mines operating compared to 23 during 1998 (Platt's Metals Week, 1999).

In England, a report on the environmental impact of Rio Tinto's former Capper Pass tin smelter in Hull, England, was awaiting the release of former employees' occupational health records. The report was being prepared on behalf of the Transport and General Workers Union and has encompassed 2 years of study thus far. Capper Pass ceased operations in 1991. The facility was the world's largest tin smelter for many decades; it was rather unique in its ability to process concentrates and residues with tin content as low as 18%. Rio Tinto had purchased the tin smelter in 1965 and sold it to Melton Land Ltd. in 1995 following its decommissioning. Occupational health records for the former workers at Capper Pass then became the property of Melton Land Ltd. (Metal Bulletin, 1999).

The world canned tuna market, which has long been a major user of tinplate, was estimated to be worth \$6 billion in annual sales. The few existing players in the market continued to consolidate their operations, and attempted to extract further growth out of the existing base by diversifying away from the

commodity sector and branching into premium, snack-food variations. Relatively recent consolidations include H.J. Heinz's 1997 acquisition of U.K.-based John West Seafood and U.K.-based Princess Foods' acquisition of its Mauritian supplier, Mauritius Tuna Fishing and Canning Enterprises Ltd. earlier this year, to form Princess Tuna. StarKist, an affiliate of H.J. Heinz, was the world's largest tuna canner, with sales of about \$1 billion annually. The other two major players, also USA-based, included Chicken of the Sea International (part of Tri-Union) and Bumble Bee Seafoods.

- a) StarKist Foods commanded a 50% share of the tuna market in the United States and 20% worldwide. All cans used by StarKist were self-manufactured by Heinz, and the new Smooth-Pull easy open end was proving successful with consumers for its convenience.
- b) Bumble Bee is based in San Diego, CA, and produces the United States' leading brand of albacore tuna.
- c) Chicken of the Sea is based in California. It merged, in 1998, with Tri-Union, which was partly composed of Thai Union International, the largest tuna processor in Thailand. In the United States, Chicken of the Sea has a market share of about 25%, with product distribution mainly in Central America and

South America. The firm recently introduced a 1.2-kg pouch, easily torn open, to supplement its canned products.

Overall tuna market growth in the USA was slower than the rest of the world; the domestic market was already well developed and only grew about 1% last year, compared with 2.5% worldwide. One-third of all tuna consumption took place in the United States (Canning and Filling, 1999).

Update

On August 27, 1999, the *Platt's Metals Week* composite price for tin was \$3.55 per pound.

References Cited

- Canning and Filling, 1999, Big fish: Canning and Filling, August, p. 28-30.
CRU Tin Monitor, 1999a, Latest news on Pirquitas project: CRU International Ltd., June, p. 8.
———1999b, Tin Australia poised for renaissance: CRU International Ltd., June, p. 6.
Metal Bulletin, 1999, Rio Tinto awaits Capper Pass report: Metal Bulletin, no. 8397, July 29, p. 7.
Platt's Metals Week, 1999, Thai demand and Thaisarco output edge higher: Platt's Metals Week, v. 70, no. 14, July 19, p. 16.

TABLE 1
SALIENT TIN STATISTICS 1/

(Metric tons, unless otherwise noted)

	1999			
	1998 p/	June	July	January- July
Production, secondary e/ 2/	10,800	900	900	6,300
Consumption:				
Primary	41,400	3,640	3,680	25,800
Secondary	11,400	1,060	1,040	7,300
Imports for consumption, metal	44,000	4,470	NA	NA
Exports, metal	5,020	549	NA	NA
Stocks at end of period	XX	7,750 r/	7,320	XX
Prices (average cents per pound): 3/				
Metals Week composite 4/	373.26	360.01 r/	357.87	XX
Metals Week New York dealer	261.38	248.17 r/	246.62	XX
London, standard grade, cash	251.00	239.00	236.00	XX
Kuala Lumpur	246.06	237.13 r/	234.40	XX

e/ Estimated. p/ Preliminary. r/ Revised. NA Not available. XX Not applicable.

1/ Data are rounded to three significant digits, except prices.

2/ Includes tin recovered from alloys and tinplate. The detinning of tinplate (coated steel) yields only a small part of the total.

3/ From Platt's Metals Week.

4/ The Metals Week composite price is a calculated formula, not a market price, that includes fixed and finance charges, and a risk factor. It normally is substantially higher than other tin prices.

TABLE 2
METALS WEEK COMPOSITE PRICE 1/

(Cents per pound)

Period	High	Low	Average
1998:			
July	381.20	374.98	377.55
August	386.88	374.45	380.30
September	373.12	364.56	368.24
October	374.40	356.46	366.88
November	380.73	361.99	370.09
December	363.97	350.47	357.58
January-December	413.70	350.47	373.26
1999:			
January	353.37	343.72	348.60 r/
February	364.44	351.24	356.57 r/
March	363.63	356.99	361.19
April	377.31	357.08	365.05
May	384.76	373.61	380.66 r/
June	368.44	354.81	360.01 r/
July	362.56	356.00	357.87

r/ Revised.

1/ The Metals Week composite price is a calculated formula, not a market price, that includes fixed and finance charges, and a risk factor. It normally is substantially higher than other tin prices.

Source: Platt's Metals Week.

TABLE 3
TINPLATE PRODUCTION AND SHIPMENTS IN THE UNITED STATES 1/

(Metric tons, unless otherwise noted)

Period	Tinplate waste (waste, strips, cobble, etc.) (gross weight)	Tinplate (all forms)			Shipments 2/
		Gross weight	Tin content	Tin per metric ton of plate (kilograms)	
1998 p/	W	1,700,000	8,760	5.2	2,320,000
1999:					
January	W	127,000	695 r/	5.5 r/	185,000
February	W	135,000	702 r/	5.2 r/	177,000
March	W	143,000	757 r/	5.3 r/	218,000
April	W	144,000	770 r/	5.4	195,000
May	W	148,000	795 r/	5.5	196,000
June	W	144,000 r/	748 r/	5.2 r/	207,000
July	W	154,000	748	4.9	NA

p/ Preliminary. r/ Revised. NA Not available. W Withheld to avoid disclosing company proprietary data.

1/ Data are rounded to three significant digits.

2/ Shipments data from American Iron and Steel Institute monthly publication.

TABLE 4
U.S. TIN IMPORTS FOR CONSUMPTION AND EXPORTS 1/

(Metric tons)

Country or product	1998	1999		
		May	June	January- June
Imports:				
Metal (unwrought tin):				
Belgium	324	6	6	30
Bolivia	5,160	303	217	1,590
Brazil	4,710	461	379	1,860
Chile	894	496	490	2,270
China	9,870	539	1,430	6,050
Hong Kong	840	--	--	95
India	359	--	--	--
Indonesia	7,880	660	702	4,040
Japan	222	--	--	123
Malaysia	1,870	81	40	744
Peru	8,650	400	1,200	4,640
Singapore	822	--	--	60
Thailand	540	--	--	20
United Arab Emirates	100	--	--	--
United Kingdom	790	--	--	2
Vietnam	212	--	--	--
Other	220	44	9	180
Total	44,000	2,990	4,470	21,700
Other (gross weight):				
Alloys	1,320	285	352	1,430
Bars and rods	1,160	77	68	478
Foil, tubes, and pipes	3	1	--	1
Plates, sheets, and strip	93	3	3	24
Waste and scrap	4,190	166	171	1,580
Miscellaneous	1,800	272	231	972
Total	8,560	804	825	4,490
Exports (metal)	5,020	506	549	3,120

1/ Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.

TABLE 5
CONSUMPTION OF TIN IN THE UNITED STATES, BY FINISHED PRODUCT 1/

(Metric tons of contained tin)

Product	1998 p/	1999						January- July total
		June			July			
		Primary	Secondary	Total	Primary	Secondary	Total	
Alloys (miscellaneous) 2/	368	W	W	W	W	W	W	W
Babbitt	35	W	W	W	W	W	W	22
Bar tin and anodes	20	20	--	20	21	--	21	139
Bronze and brass	1,010	106	136	242	80	131	211	1,780
Chemicals	8,020	684	W	684	684	W	684	4,690
Collapsible tubes and foil	177	W	W	W	W	W	W	W
Solder	12,500	782 r/	330 r/	1,110 r/	805	319	1,120	7,340
Tinning	764	36 r/	--	36 r/	30	--	30	284
Tinplate 3/	8,800	748 r/	--	748 r/	748	--	748	5,290
Tin powder	W	W	--	W	W	--	W	W
White metal 4/	W	W	--	W	W	--	W	W
Other	4,310	359 r/	95 r/	453 r/	411	94	505	3,760
Total reported	36,000	2,740 r/	561	3,300	2,780	544	3,320	23,300
Estimated undistributed consumption 5/	16,800	900	500	1,400	900	500	1,400	9,800
Grand total	52,800	3,640 r/	1,060	4,700	3,680	1,040	4,720	33,100

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data; included with "Other."

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includesterne metal.

3/ Includes secondary pig tin and tin components of tinplating chemical solutions.

4/ Includes pewter, britannia metal, and jewelers' metal.

5/ Estimated consumption of plants reporting on an annual basis.

TABLE 6
DEFENSE LOGISTICS AGENCY
TIN STOCKPILE DISPOSALS 1/

(Metric tons)

Period	Monthly disposals 2/
1998:	
July	250
August	250
September	220
October	190
November	--
December	20
January-December	1,900
1999:	
January	20
February	--
March	5
April	30
May	--
June	20
July	220
Total	295

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ These disposals represent only the daily spot sales program, not the long-term dealer contract sales program.

Source: Defense Logistics Agency.